

## **Remarks**

Reconsideration and reexamination of the above-identified patent application, as amended, are respectfully requested. Claims 1-2, 4-7, and 9-10 are pending in this application upon entry of this Amendment. In this Amendment, the Applicant has amended claims 4 and 6. No claims have been cancelled or added in this Amendment. Of the pending claims, claim 1 is the only independent claim.

### **Claim Objections**

In the final Office Action mailed June 6, 2005, the Examiner objected to claims 4 and 6 for having informalities. The Applicant has amended claims 4 and 6 accordingly.

### **Claim Rejections - 35 U.S.C. § 103**

The Examiner rejected claims 1-3 and 9-10 under 35 U.S.C. § 103(a) as being unpatentable over:

1. U.S. Patent No. 5,608,447 issued to Farry et al. ("Farry") in view of
2. U.S. Patent No. 5,559,955 issued to Dev et al. ("Dev"),
3. U.S. Patent No. 5,513,171 issued to Ludwiczak et al. ("Ludwiczak"),
4. U.S. Patent No. 5,519,830 issued to Opoczynski ("Opoczynski"),
5. U.S. Patent No. 6,137,793 issued to Gorman et al. ("Gorman"),
6. U.S. Patent No. 5,761,602 issued to Wagner et al. ("Wagner"), and
7. U.S. Patent No. 5,742,762 issued to Scholl et al. ("Scholl").

The Applicant respectfully traverses this rejection and believes that the claimed invention, as set forth in independent claim 1, is patentable under 35 U.S.C. § 103(a) over Farry, Dev, Ludwiczak, Opoczynski, Gorman, Wagner, and Scholl.

## **1. The Claimed Invention**

The claimed invention, as recited in independent claim 1, is directed to a hybrid fiber coax (HFC) network. The HFC network includes network elements. The network elements include host digital terminals (HDTs) for communicating telephony signals with the customer-premises equipment (CPE) of subscribers, cable modem termination systems (CMTSS) for communicating IP data signals with the CPE of subscribers, and sets of video equipment (i.e., video servers) for communicating video signals with the CPE of subscribers.

The HFC network further includes an SDI database which stores data indicative of: the configuration of the network elements and the CPE of the subscribers, assigned capacity of the network elements, and the physical and logical connections between the network elements themselves and with the CPE of the subscribers.

The HFC network further includes an online provisioning application link (OPAL) operable with the SDI database to access the stored data for automatically provisioning selected ones of the network elements with the CPE of a given subscriber based on the configuration of the network elements and the CPE of the given subscriber and based on the assigned capacity of the network elements such that the provisioned network elements and the CPE of the given subscriber are physically and logically connected in order to enable communication of telephony, IP data, and video signals between the network elements and the CPE of the given subscriber.

## **2. The Claimed Invention Compared to the Cited Art**

The claimed invention generally differs from any combination of the cited art in that in the claimed invention the OPAL accesses the stored data in the SDI database to automatically provision selected ones of the network elements (i.e., automatically provisions selected ones of the HDTs, the CMTSS, and the video servers) with the CPE of a subscriber such that the provisioned network elements and the CPE of the subscriber are physically and

logically connected to enable communication of the telephony, IP data, and video signals between the provisioned network elements and the CPE of the subscriber. That is, the OPAL provisions selected ones of the HDTs, CMTSSs, and video servers with the CPE of the subscriber such that the provisioned ones of the HDTs, CMTSSs, and video servers and the CPE of the subscriber are physically and logically connected to enable communication of the telephony, IP data, and video signals between the provisioned ones of the HDTs, CMTSSs, and video servers and the CPE of the subscriber.

With respect to Farry, the Examiner posited (page 3 of the final Office Action) that Farry discloses a plurality of network elements operable for communicating telephony, data, and video signals with CPE of subscribers (noting that broadcast video, POTS, and data services are all provided, col. 6, line 49 to col. 7, line 15 of Farry). The Examiner posited (page 3 of the final Office Action) that Farry discloses that the network elements includes sets of video equipment (i.e., video servers) for communicating video signals with the CPE of subscribers (noting col. 4, lines 18-20 and col. 6, lines 10-32 of Farry). The Examiner posited (page 4 of the final Office Action) that Farry does not disclose the network elements including HDTs and CMTSSs. The Examiner posited (page 11 of the final Office Action) that Opoczynski discloses the HDTs and that Gorman discloses the CMTSSs.

The Examiner further posited (page 4 of the final Office Action) that Farry discloses an OPAL (noting Level 1 gateway, col. 4, lines 43-51 of Farry) operable with a database (noting col. 11, lines 32-36 - permanent virtual circuit controller 530) for provisioning selected ones of the network elements with the CPE of the subscriber in order to enable communication of telephony, data, and video signals between the network elements and the CPE of the subscriber.

Notably, the PVC controller of Farry “stores data tables defining possible virtual circuits through the ATM switch” and the digital entertainment terminals (DET) (i.e., CPE) of subscribers. As such, Farry provisions a virtual circuit between the ATM switch and the CPE for routing data between an ISP and the CPE. In contrast, the claimed invention

provisions selected ones of HDTs, CMTSSs, and video servers with the CPE of a subscriber such that the provisioned ones of the HDTs, CMTSSs, and video servers and the CPE of the subscriber are physically and logically connected to enable communication of the telephony, IP data, and video signals between the provisioned ones of the HDTs, CMTSSs, and video servers and the CPE of the subscriber.

More particularly, the claimed invention physically and logically connects selected ones of HDTs, CMTSSs, and video servers with the CPE of a subscriber whereas Farry establishes a virtual circuit between an ATM switch and CPE of a subscriber. That is, Farry does not teach or suggest provisioning a network element such as a video server, a HDT, or a CMTS with a subscriber as claimed. Modifying Farry for the position that the network elements of Farry include HDTs as taught by Opoczynski or CMTSSs as taught by Gorman does not cure the deficiencies of Farry in that Farry does not teach or suggest provisioning such network elements as claimed.

In view of the foregoing remarks, the Applicant believes that independent claim 1 is patentable under 35 U.S.C. § 103(a) over the cited art. Claims 2 and 9-10 depend from independent claim 1 and include the limitations therein. Accordingly, the Applicant respectfully requests reconsideration and withdrawal of the rejection to claims 1-2 and 9-10 under 35 U.S.C. § 103(a).

The Examiner rejected claims 4-7 under 35 U.S.C. § 103(a) as being unpatentable over Ferry, Dev, Ludwiczak, Opoczynski, Gorman, Wagner, and Scholl, as applied to claim 1 above, and further in view of U.S. Patent No. 4,972,453 issued to Daniel, III et al. ("Daniel"). Claims 4-7 depend from independent claim 1 and include the limitations therein. Thus, the Applicant respectfully requests reconsideration and withdrawal of the rejection to claims 4-7 under 35 U.S.C. § 103(a).

**CONCLUSION**

In summary, claims 1-2, 4-7, and 9-10, as amended, meet the substantive requirements for patentability. The case is in appropriate condition for allowance. Accordingly, such action is respectfully requested.

If a telephone or video conference would expedite allowance or resolve any further questions, such a conference is invited at the convenience of the Examiner.

Respectfully submitted,

**HARVEY R. BIALK et al.**

By

James N. Kallist  
Reg. No. 41,102  
Attorney for Applicant

Date: August 8, 2005

**BROOKS KUSHMAN P.C.**  
1000 Town Center, 22nd Floor  
Southfield, MI 48075-1238  
Phone: 248-358-4400  
Fax: 248-358-3351